

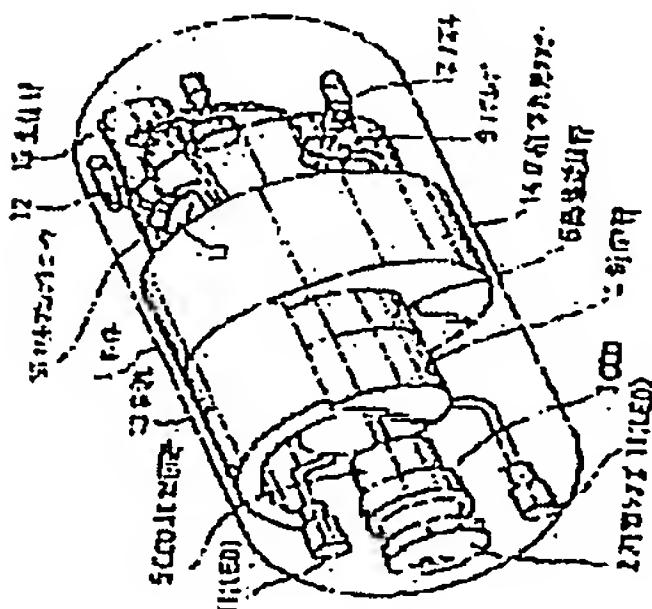
## PATENT ABSTRACTS OF JAPAN

(11) Publication number : 04-144533  
 (43) Date of publication of application : 19.05.1992

(51) Int. Cl. A61B 1/00  
 A61B 5/14  
 A61B 17/00  
 // A61B 8/14  
 A61F 2/06  
 A61F 2/28  
 B64G 1/66

(21) Application number : 02-268866 (71) Applicant : OLYMPUS OPTICAL CO LTD  
 (22) Date of filing : 05.10.1990 (72) Inventor : ADACHI HIDEYUKI  
 UEDA YASUHIRO  
 TABATA TAKAO  
 GOTANDA SHOICHI  
 KUJO MASAHIRO  
 OSHIMA YUTAKA  
 OKADA TSUTOMU  
 SUZUKI AKIRA  
 FUSE EIICHI  
 HAYASHI MASAOKI

## (54) ENDOSCOPE



## (57) Abstract:

PURPOSE: To facilitate inspection, etc., to reduce intrusiveness, and to extend inspection range by controlling the main body for executing telemetry transmission of an image signal from an observing means so that the direction of inertia force can be switched to the different direction, floating it in a zero gravity space and using it.  
 CONSTITUTION: In a minute gravity space or in a zero gravity space, this endoscope is inserted into a body-cavity of a patient. In the body-cavity, a main body 1 is in a floating state. In such a state, in the case it is desired to vary or advance the attitude of the main body 1, it is operated by

operating an external transmitting part placed in the outside of the body and executing telemetry transmission of a signal to a receiving part 15 of the endoscope. In accordance with the contents of the signal received by the receiving part 15, a valve controller 16 opens a prescribed valve 9 repeatedly for a short time each, and emits singly and repeatedly compressed air from a tank 14. By a reaction at the time of emitting singly compressed air from a nozzle 12, inertia force works on the main body 1. In such a state, in accordance with the blowout direction from the nozzle 12, inertial navigation, that is, a conversion of the direction and a movement of the main body 1 can be executed.